Response to Office Action dated July 15, 2009

REMARKS/ARGUMENTS

Claim 17 to 19, 29 and 31 to 33 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,733,498 (Kawakami et al.). Claims 21 to 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawakami et al. in view of U.S. Patent No. 5,554,338 (Sugihara et al.). Claims 24 to 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawakami et al. in view of U.S. Patent No. 6,551,551 (Gegel et al.). Claims 27 and 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawakami et al. in view of GB 1 470 949 (Ford Motor Company, Ltd.).

Claims 17, 29 and 33 have been amended. Claims 34 to 42 have been added. Support is found at [0015], [0016] and [0003] for example.

Reconsideration of the application is respectfully requested.

Rejections under 35 U.S.C. 102(b)

Claim 17 to 19, 29 and 31 to 33 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,733,498 (Kawakami et al.).

Claim 17, 29 and 33 have been amended to recite the limitation that the homogenous material is comprised of "at least 50% metal powder."

Kawakami is specifically directed to a ceramic silicon nitride reaction-sintered body, as opposed to a metal powder body. However, it is acknowledged that small amounts of metal powders such as aluminum oxide, cobalt, chromium oxide, yttrium oxide and other metals of Group IIa in the Periodic Table are sometimes used as sintering aids. The weight of these aids is minor though, at 10% or less by weight. See col. 12, lines 1 to 23 for example.

Otherwise, the entire disclosure of Kawakami is directed to a primarily non-metallic silicon nitride body, and addresses the particle sizes needed to deal with issues specifically sealing with silicon nitride bodies.

To more clearly distinguish the present invention, the limitation of at least 50% metal powder has been added, as discusses at [0016].

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Kawakami thus does not teach or disclosure using a homogenous material comprised of at least 50% metal powder. In fact, Kawakami specifically teaches using much less actual metal powder (on the order of 10% or less), and making the majority of the body of silicon nitride. It is thus also respectfully submitted that it would not have been obvious to modify Kawakami to include the limitation of at least 50% metal powder, as Kawakami specifically is directed to silicon nitride and seeks to use much less actual metal powder. See claim 1, title and entire disclosure of Kawakami.

Withdrawal of the rejection under 35 U.S.C. 102(b) of claims 17 to 19, 29 and 31 to 33 is respectfully requested.

Rejections under 35 U.S.C. 103(a)

Claims 21 to 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawakami et al. in view of U.S. Patent No. 5,554,338 (Sugihara et al.). Claims 24 to 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawakami et al. in view of U.S. Patent No. 6,551,551 (Gegel et al.). Claims 27 and 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawakami et al. in view of GB 1 470 949 (Ford Motor Company, Ltd.).

In view of the above withdrawal is respectfully requested. In addition, it is noted that the Office Action is in error with respect to claims 21 to 16 as it mentions that it would have been obvious to modify Ford as a base reference. However, Ford is no longer the base reference. (See Paragraphs 8 and 9 of the Office Action).

Withdrawal of the rejections under 35 U.S.C. §103(a) to claims 21 to 28 thus is respectfully requested.

New Claims

New claims 34 to 42 recite limitations also respectfully not disclosed in Kawakami and which find support in the present specification at [0003], [0015] and [0016] for example.

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CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully Submitted,

DAVIDSON, AVIDSON & KAPPEL, LLC

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By: John 8. Economou, Reg. No. 38,439

DAVIDSON, DAVIDSON & KAPPEL, LLC 485 Seventh Avenue, 14th Floor New York, New York 10018 (212) 736 – 1940